

MATERIAL SAFETY DATA SHEET

BLOCKADE™

SECTION 1: IDENTIFICATION

CHEMICAL NAME: BLOCKADE
CHEMICAL FAMILY: Proprietary Mixture/ Blend
CAS REG NO: None
EMERGENCY PHONE NO: 281-713-8941
EFFECTIVE DATE: 11/07/2011
SUPERCEDES: 01/01/2007

SECTION 2: COMPOSITION / HAZARDOUS INGREDIENTS

The following components present at a concentration of $\geq 0.1\%$ are listed as carcinogens or potential carcinogens by either the National Toxicology Program (NTP) or the International Agency for Research on Cancer (IARC) or OSHA:

Component	CAS#	% by wt.	PEL	TLV
Crystalline silica	148-08-67	< 0.25%	.05 mg/m ³	0.1 mg/m ³ respirable dust

Product should be considered a nuisance particulate, TLV of 5 mg/m³ total dust, 5 mg/m³ respirable dust.

SECTION 3: PHYSICAL DATA

Appearance: Light-gray coarse powder
Bulk Density: (lb/ft³), compacted: 38-42
uncompacted: 30-34
pH (5% by weight in water): 9-11
Solubility in water at 20 °C: Partially soluble water; dispersible in oil or water

SECTION 4: REACTIVITY DATA

Stable (X) **Unstable** ()
Hazardous Combustion or Decomposition Products: NE
Incompatibility (materials to avoid): Fluorine, Oxygen difluoride, Chlorine Trifluoride, Hydrofluoric Acid
Hazardous Polymerization: Will not occur

SECTION 5: FIRE AND EXPLOSION DATA

Flash Point (method used): Not Known
Auto Ignition Temperature: Not Known
Flammable Limits in Air (% by Volume): Lower: Not Known
Upper: Not Known
Special Fire Fighting Procedures: Evacuate area of all necessary personnel. Firefighters should wear NIOSH approved self-contained breathing apparatus (SCBA) and other protective equipment and/or garments described in Section 9 if conditions warrant. Use water fog or spray to cool exposed containers and equipment. self-contained breathing apparatus.
Unusual Fire and Explosion Hazards: None Known
Extinguishing Media: Water, Foam, Dry Chemical, or Carbon Dioxide. Use media appropriate for surrounding fire.

SECTION 6: EMERGENCY AND FIRST AID PROCEDURES

Ingestion: Give two glasses of water and induce vomiting, only if subject is conscious. Keep subjects head below hip level to prevent aspiration. Seek medical attention if necessary.
Inhalation: If large quantities are inhaled, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, resuscitate with artificial respiration, administer oxygen, and seek immediate medical attention.
Skin: Wash with plenty of soap and water for about 15 minutes. Remove contaminated clothing and shoes and wash thoroughly.
Eyes: Material is dusty and may scratch the surface of the eyes. If large amounts of this material get into the eyes, there may be some vision

impairment for a few days. Not expected to cause prolonged or significant eye irritation. Immediately flush eyes with large amounts of water for at least 15 minutes, holding eyelids apart to ensure adequate flushing. See a physician if adverse irritation or symptoms develop. Irrigation of the eye with a 0.01 to 0.05M (0.3 to 1.5%) EDTA solution at pH 4.6 to 7 will be helpful.

SECTION 7: HEALTH HAZARD INFORMATION

OSHA Permissible Exposure Limit: None established
ACGIH Threshold Limit Value: None Established
Primary Route(s) of Exposure/Entry: Ingestion, Inhalation, Skin, Eye
Acute Effects of Overexposure:
Ingestion: May cause stomach upset resulting in nausea; may cause diarrhea.
Inhalation: Although this material contains a very small percentage of crystalline silicate (<0.3% by wt), all efforts should be made to protect workers from inhalation. Irritant. Large concentrations of dust may cause damage to the upper respiratory tract. Long term exposure to crystalline silicate can cause damage to the lungs.
Skin: Irritant causing irritation, redness and scaling.
Eye: Irritant. May be destructive to eye tissues causing damage to the respiratory tract.
Other Health Hazards: None
Listed as Carcinogen or Potential Carcinogen: Crystalline silica (<0.25% by weight), is also a common component of sand, and has been classified as probable carcinogen for humans by IARC.

SECTION 8: SPILL, LEAK AND DISPOSAL PROCEDURES

In Case of Spill or Leak: Avoid dusty conditions. Wet down area with water. Sweep or vacuum and place in suitable container for disposal.
Waste Disposal Method: Certified landfill or incineration under conditions that meet all applicable federal, state, and local regulations.
EPA Registry Number: None
In TSCA Inventory: Yes
Covered Under CERCLA or SUPERFUND Legislation: No
Environmental Toxicity Data: Not Known

SECTION 9: PERSONAL PROTECTION INFORMATION

Respiratory Protection: NIOSH approved respirator for dusts.
Ventilation: Local ventilation recommended in enclosed areas.
Protective Gloves: Plastic or rubber.
Eye Protection: Chemical safety goggles.
Other Control Measures: Maintain dust less than 2 mg/m³.

SECTION 10: SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing: Avoid dusty conditions. Best to use NIOSH specified, European standard EN 149 or equivalent respirator when using this product. Maintain dust concentration less than 2 mg/m³. Do not get in eyes – wear chemical safety goggles. Avoid prolonged skin contact. Wash hands before eating, drinking, smoking, or using toilet facilities.

SECTION 11: TOXICOLOGICAL INFORMATION

N/A. No toxicological information is available on this product.

SECTION 12: ECOLOGICAL INFORMATION

N/A. No ecological information is available on this product.

SECTION 13: DISPOSAL CONSIDERATIONS



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Recover and reuse if possible. Dispose of in certified landfill or incineration under conditions that meet all applicable federal, state and local regulations.

SECTION 14: TRANSPORT INFORMATION

Proper Shipping Name:	Not regulated by DOT
as a hazardous material	
Hazard Class:	None.
UN Number:	None.
Packing Group:	None.
Canadian TDG:	Not restricted.

SECTION 15: REGULATORY INFORMATION

OSHA (29 CFR 1910.1200): This product should be included in a hazard communication program.

US TSCA Inventory: All components are listed on inventory.

EPA RCRA HAZARDOUS WASTE: If this product becomes a waste, it DOES NOT meet the criteria of as a hazardous waste as prescribed by RCRA.

CERCLA: Not subject to reporting.

EPA SARA Title III Extremely Hazardous

Substances:	N/A
EPA SARA 311/312 Hazard Class:	
Immediate acute health effects	No
Delayed chronic health effects	Yes
Fire Hazard	No
Sudden release of pressure hazard	No
Reactivity hazard	No

SARA 313: This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372). Crystalline silica (<0.25% by weight).

NFPA Hazard Codes: Health: 1, Flammability: 0, Reactivity: 0, Special Hazards: 0

Canadian Regulations:

Canadian DSL Inventory: All components listed on inventory

WHMIS Hazard Class: D2A Very Toxic Materials (crystalline silica: <0.25% by wt.)

Drillchem believes the information contained in the MSDS to be accurate at the time of preparation and has been compiled using sources believed to be reliable. However, Drillchem makes no warranty, either expressed or implied, concerning the accuracy or completeness of the information presented. It is the responsibility of the user to comply with local, state and federal regulations concerning use of this product. It is the further responsibility of the buyer to research and understand safe methods of storing, handling and disposal of this product.